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EXAMINER

BARKER, MATTHEW M

ART UNIT PAPER NUMBER

3662

DATE MAILED: 02/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/753,148

Applicant(s)

CARMICHAEL ET AL.

Examiner

Matthew M. Barker

Art Unit

3662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☒ Claim(s) 24, 26-27 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01/07/2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the configuration for CAN 2.0B mode found in claims 8, 18, and 39 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Objections***

2. Claim 24 is objected to because of the following informalities: There is insufficient antecedent basis for claim 24 to depend directly on claim 21 (line 4, "said images"). For the purposes of examination, the claim is read as dependent on claim 23. Appropriate correction is required.
3. Claims 26 and 27 are objected to because of the following informalities: There is insufficient antecedent basis for the limitation "said camera" on line 10 of each claim. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
5. Claims 6-8 and 37-39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 6 and 37 recite the limitation "another of said plurality" in line 3. There is insufficient antecedent basis for this limitation in the claim. There cannot be "another of said plurality" because a first has not been established.

Claims 7-8 and 38-39 recite the limitation "yet another of said plurality" in line 3. There is insufficient antecedent basis for this limitation in the claim. There cannot be "yet another of said plurality" because a first has not been established.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

7. Claims 1-2, 5-7, 14-17, 21-22, 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Kuhn.

Regarding claims 1, 5-7, and 21, Kuhn discloses an apparatus for interfacing between on board electronics in a vehicle and a radar device (20) (See Figure 2). Kuhn discloses the use of an on board electronics interface (44). See also Figure 3, (50), which provides the capability to read vehicle data using different signaling protocols, including variable pulse width mode, pulse width modulated mode, and ISO 9141 mode (see paragraphs 0043 and 0008). Kuhn discloses that interface (50) may be used with radar device (20) (See paragraph 50).

The interface inherently includes a plurality of data busses for communicating with the on board electronics, each configured for a different signaling protocol.

Furthermore, the interface inherently includes the claimed processor for determining the signaling protocol, and selecting a data bus from the plurality of data busses that is compatible with the signaling protocol of the on board electronics.

The processor communicates with the on board electronics to receive data (paragraph 0043, lines 5-7).

The processor within interface (44) translates and communicates the data in a compatible form to the radar device (20). (See paragraph 0049, lines 3-6).

Regarding claims 2 and 22, Kuhn discloses that the received and translated data are vehicle speed information (paragraph 0034, lines 18-19).

Claims 14-17 are the inherent method of interfacing between on board electronics and a radar device using the apparatus of claims 1 and 5-7 discussed above.

Claim 25 is the inherent method of interfacing between on board electronics and a radar device using the apparatus of claim 21 discussed above.

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-8, 10-11, 14-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Squicciarini in view of Kuhn.

Regarding claims 1, 5-7, and 21, Squicciarini discloses an on board patrol vehicle radar apparatus (Figure 1).

Squicciarini does not disclose a plurality of data busses for communicating between the apparatus and the on board electronics, a data processor for determining the signaling protocol of the on board electronics, or the data processor communicating with the on board electronics to receive data.

Kuhn discloses an apparatus for interfacing between on board electronics in a vehicle and a radar device (20) (See Figure 2). Kuhn discloses the use of an on board electronics interface (44), see also Figure 3, (50), which provides the capability to read vehicle data using different signaling protocols, including variable pulse width mode, pulse width modulated mode, and ISO 9141 mode (see paragraphs 0043 and 0008). Kuhn discloses that interface (50) may be used with radar device (20) (See paragraph 50).

The interface inherently includes a plurality of data busses for communicating with the on board electronics, each configured for a different signaling protocol.

Furthermore, the interface inherently includes the claimed processor for determining the signaling protocol, and selecting a data bus from the plurality of data busses that is compatible with the signaling protocol of the on board electronics.

The processor communicates with the on board electronics to receive data (paragraph 0043, lines 5-7).

The processor within interface (44) translates and communicates the data in a compatible form to the radar device (20) (See paragraph 0049, lines 3-6).

Regarding claims 2 and 22, Kuhn discloses that the received and translated data are vehicle speed information (paragraph 0034, lines 18-19), as does Squicciarini (column 5, lines 40-45).

It would have been obvious to modify Squicciarini to use the interfacing and processing of Kuhn in order to provide the radar device with the patrol vehicle speed from the on board electronics instead of determining it from the radar itself, thereby providing a more accurate measure of the target vehicle speed.

Regarding claims 3 and 23, Squicciarini discloses an on board video surveillance system (Figure 1) for taking images. Squicciarini further discloses a second data processor (52) for communicating the translated data to the video surveillance system in a form for displaying or recording with the images (See column 5, lines 40-55).

Regarding claims 4 and 24, Squicciarini discloses that the received and translated data are vehicle speed information (column 5, lines 40-45).

Regarding claims 8 and 18, it would have been obvious to further modify Squicciarini to include a data bus configured in the CAN 2.0B mode in order to broaden the range of applications compatible for the interface.

Regarding claim 10, Squicciarini discloses a video surveillance apparatus (Figure 1) in a vehicle for taking images.

Squicciarini does not disclose a plurality of data busses for communicating between the apparatus and the on board electronics, a data processor for determining the signaling protocol of the on board electronics, or the data processor communicating with the on board electronics to receive data.



Kuhn discloses an apparatus for interfacing between on board electronics in a vehicle and a radar device (20) (See Figure 2). Kuhn discloses the use of an on board electronics interface (44), see also Figure 3, (50), which provides the capability to read vehicle data using different signaling protocols (paragraph 0043). Kuhn discloses that interface (50) may be used with radar device (20) (See paragraph 50).

The interface inherently includes a plurality of data busses for communicating with the on board electronics, each configured for a different signaling protocol.

Furthermore, the interface inherently includes the claimed processor for determining the signaling protocol, and selecting a data bus from the plurality of data busses that is compatible with the signaling protocol of the on board electronics.

The processor communicates with the on board electronics to receive data (paragraph 0043, lines 5-7).

The processor within interface (44) translates and communicates the data in a compatible form to the radar device (20) (See paragraph 0049, lines 3-6).

It would have been obvious to modify Squicciarini to use the interfacing and processing taught by Kuhn in order to provide the video surveillance apparatus with the patrol vehicle speed from the on board electronics instead determining it from a radar device, thereby providing a more reliable and accurate display and recording of patrol vehicle speed.

Regarding claim 11, Squicciarini further discloses a second data processor (52) for communicating the translated data to the video surveillance system in a form for displaying or recording with the images (See column 5, lines 40-55).

Claims 19 and 20 are the inherent methods of interfacing between on board electronics and a video surveillance system using the apparatus of claims 10 and 11 discussed above.

Claims 14-17 are the inherent method of interfacing between on board electronics and a radar device using the apparatus of claims 1 and 5-7 discussed above.

Claim 25 is the inherent method of interfacing between on board electronics and a radar device using the apparatus of claim 21 discussed above.

Regarding claims 26-27, Squicciarini discloses a video surveillance system (Figure 1) in a vehicle for taking images, translating data into a form compatible with the system, communicating the translated data to the system, and recording and displaying translated data with the images (See column 5, lines 40-55).

Squicciarini does not disclose an interface to receive data over a data bus from the on board electronics.

Kuhn discloses the use of an on board electronics interface (44, see also Figure 3, 50).

The interface inherently includes a data bus for communicating with the on board electronics.

The processor communicates with the on board electronics to receive data (paragraph 0043, lines 5-7).

The processor within interface (44) inherently translates and communicates the data, as this is the purpose of an interface.

It would have been obvious to modify Squicciarini to use the interfacing and processing taught by Kuhn in order to provide the video surveillance apparatus with the patrol vehicle speed from the on board electronics instead determining it from a radar device, thereby providing a more reliable and accurate display and recording of patrol vehicle speed.

10. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Squicciarini in view of Kuhn as applied to claim 2 above and in further view of Aker ('418).

Squicciarini as modified does not disclose stationary and moving modes. Aker discloses the claimed automatic switching between stationary and moving modes (column 3, lines 25-30).

It would have been obvious to further modify Squicciarini to employ the automatic switching between stationary and moving modes taught by Aker so that the operator does not have to switch manually.

11. Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Squicciarini in view of Kuhn as applied to claim 10 above, and in further view of Tseng.

Squicciarini nor Kuhn disclose using the translated data to control the field of view of a camera of the video surveillance system.

Tseng discloses a video surveillance system (306) (Figure 3) in a vehicle for taking images. Tseng further discloses that the camera will look further ahead (thereby narrowing the field of view, (308)) as the vehicle travels faster (column 5, lines 59-67).

Tseng does not disclose the details of controlling the field of view, however Tseng inherently teaches a plurality of steps as the speed of the vehicle increases from zero, each associated with a range of speed.

It would have been obvious to further modify Squicciarini to include controlling of the field of view of the camera as taught by Tseng in order to reduce unwanted information in the field of view at higher speeds.

12. Claims 28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Squicciarini in view of Kuhn and Tseng.

Squicciarini discloses a video surveillance system (Figure 1) in a vehicle for taking images, translating data into a form compatible with the system, communicating the translated data to the system, and recording and displaying translated data with the images (See column 5, lines 40-55).

Squicciarini does not disclose an interface to receive data over a data bus from the on board electronics, or using the translated data to control the field of view of a camera.

Kuhn discloses the use of an on board electronics interface (44, see also Figure 3, 50). It would have been obvious to use an adaptable OBD interface (50) instead of standard OBD interface (44) in order to provide a wider range of vehicle compatibility.

Regarding claims 28 and 29, the interface inherently includes a data bus for communicating with the on board electronics.

The processor communicates with the on board electronics to receive data (paragraph 0043, lines 5-7).

The processor within interface (44) inherently translates and communicates the data, as this is the purpose of an interface.

It would have been obvious to modify Squicciarini to use the interfacing and processing taught by Kuhn in order to provide the video surveillance apparatus with the patrol vehicle speed from the on board electronics instead determining it from a radar device, thereby providing a more reliable and accurate display and recording of patrol vehicle speed.

Regarding claims 30 and 31, Tseng discloses a video surveillance system (306) (Figure 3) in a vehicle for taking images. Tseng further discloses that the camera will look further ahead, thereby narrowing the field of view, (308), as the vehicle travels faster (column 5, lines 59-67).

Tseng does not disclose the details of controlling the field of view, however Tseng inherently teaches a plurality of steps, each associated with a range of speed, where the field of view changes to an adjacent step when the speed of the vehicle changes to a different range of speed.

It would have been obvious to modify Squicciarini to include controlling of the field of view of the camera as taught by Tseng in order to reduce unwanted information in the field of view at higher speeds.

13. Claims 32-33 and 36-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aker in view of Kuhn.

Regarding claims 32-33 and 36-38, Aker discloses a radar system (Figure 1) in a patrol vehicle including a radar device (12) for determining the speed of a target vehicle. Aker discloses that patrol vehicle speed information is acquired from a speedometer (column 3, lines 1-6). Aker further discloses that the patrol vehicle speed is used in determining the speed of the target vehicle (column 3, lines 50-54).

Aker does not explicitly disclose the claimed data busses or data processor.

Kuhn discloses an apparatus for interfacing between on board electronics in a vehicle and a radar device (20) (See Figure 2). Kuhn discloses the use of an on board electronics interface (44, see also Figure 3, 50), which provides the capability to read vehicle data using different signaling protocols (paragraph 0043). Kuhn discloses that interface (50) may be used with radar device (20) (See paragraph 50).

The interface inherently includes a plurality of data busses for communicating with the on board electronics, each configured for a different signaling protocol.

Furthermore, the interface inherently includes the claimed processor for determining the signaling protocol, and selecting a data bus from the plurality of data busses that is compatible with the signaling protocol of the on board electronics.

The processor communicates with the on board electronics to receive data (paragraph 0043, lines 5-7).

The processor within interface (44) inherently translates and communicates the data in a compatible form to the radar device (20), as this is the purpose of an interface.

Kuhn discloses the speed of the vehicle is determined from the translated data (paragraph 0034, lines 18-19).

Kuhn discloses that the plurality of data busses are configured for signaling in the variable pulse width mode, pulse width modulated mode, and ISO 9141 mode (see paragraphs 0043 and 0008).

It would have been obvious to modify Aker to include the data busses and processor of Kuhn, thereby acquiring the patrol vehicle speed information from the on board computer, as the computer is likely to produce more accurate and reliable data than the speedometer.

Regarding claim 39, it would have been obvious to include a data bus configured in the CAN 2.0B mode in order to broaden the range of applications compatible for the interface.

Regarding claim 40, Aker discloses the claimed stationary and moving modes (column 3, lines 25-30).

14. Claims 34-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aker in view of Kuhn as applied to Claim 32 above, and in further view of Squicciarini.

Neither Aker nor Kuhn discloses a video surveillance system or a second data processor for communicating the translated data to the video system in a form for displaying or recording of the data with the images.

Squicciarini discloses a video surveillance system (Figure 1) for taking images that also includes a radar device (24).

Squicciarini further discloses a second data processor (52) for receiving translated data from a first data processor (Figure 3, 92), and for communicating the translated data to the video surveillance system in a form for displaying or recording with the images (See column 5, lines 40-55).

Squicciarini discloses the translated data displayed with the images is vehicle speed information (column 5, lines 40-45).

It would have been obvious to further modify Aker to include a video surveillance system and processor as taught by Squicciarini in order to provide a means of reviewing the actions, including speed, of both a host and target vehicle in situations such as a police chase.

### ***Conclusion***

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Morgan, Lorenzetti, Lutter, Alvarez, Saito, Albero, Buchanan, Rao, Blanco, Luskin, Perterson, Shelton, and Davis relate to on board radar and/or video systems.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew M. Barker whose telephone number is (571)272-3103. The examiner can normally be reached on M-F, 8:30 AM-5:00 PM.




If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarcza can be reached on (571)272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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